DOCUMENT RESUME

ED 292 904 UD 026 071

TITLE	Chapter 1 in North Carolina, 1985-1986.
INSTITUTION	North Carolina State Dept. of Public Instruction, Raleigh. Div. of Support Programs.
PUB DATE	Jun 87
NOTE	14p.
PUB TYPE	Reports - Evaluative/Feasibility (142) -- Statistical Data (110)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Academic Achievement; Achievement Tests; *Compensatory Education; *Educational Improvement; Elementary Secondary Education; Mathematics Instruction; Parent Participation; *Program Costs; *Program Effectiveness; Reading Instruction; Student Characteristics
IDENTIFIERS	*Education Consolidation Improvement Act Chapter 1; *North Carolina

ABSTRACT

This document presents the distribution of Chapter 1 funds in North Carolina during academic year 1985-86, and analyzes the effects Chapter 1 programs have on student's academic performance. Included among the findings are the following: (1) 125,355 students, or nine percent of the students in North Carolina's 1,378 schools, participated in Chapter 1 programs; (2) the total expenditures were $79.4 million, of which $71.7 million was for personnel; (3) $53.0 million was used for reading instruction, $11.7 million for math instruction; (4) the average expenditure per participant was $633; (5) 57 percent of participants were male, 43 percent were female; (6) 51 percent of participants were Black, 45.1 percent were White, and 3.1 percent were American Indian; (7) pre-post achievement tests scores reveal that the participants made measurable gains in reading and mathematics; and (8) teachers comprised 68 percent of Chapter 1 staff, aides comprised 18 percent. Data are presented in 13 figures. (BJV)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

North Carolina Department of Public Instruction

Division of Support Programs

Raleigh, North Carolina
June, 1987

ED292904

UD026071

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
E. Brumback
North Carolina State Dept. of Public Instruction
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

3-24-88 UD

FOREWORD

Chapter 1 is working in North Carolina! It is clear that educationally deprived children and youth are well served by specially designed reading and mathematics programs and that they benefit from these programs.

More than 125,000 students, or nine percent of the students in the State's schools, are served by Chapter 1. Pre-post achievement test scores reveal that these participants make measurable gains in reading and mathematics. North Carolina must continue its excellent Chapter 1 programs while seeking ways to provide needed services to unserved children and youth, including the very young children and youth in high school.

Each school district in North Carolina should study this report, compare its results with the State results, and continue its search for ways to improve educational opportunities for all educationally deprived children and youth. Such steps will assure that Chapter 1 will continue to work well in North Carolina.

A. Craig Phillips
State Superintendent

Theodore R. Drain
Assistant State Superintendent
Support Services

CONTENTS

	Page
Summary	iv
Overview	1
Participants	1
Instruction	4
Staff	5
Expenditures	6
Training	7
Parent Involvement	7
Student Achievement	7
Evaluation Results	8

LIST OF FIGURES

		Page
1.	Schools Served	1
2.	Students Served By Grade	1
3.	Students Served By Gender	2
4.	Students By Ethnic Group	2
5.	Reading Pre-test	2
6.	Mathematics Pre-test	3
7.	Students By Subject Area	4
8.	Chapter 1 Staff	5
9.	Expenditures By Activity	6
10.	Reading Gains-S/S	8
11.	Mathematics Gains-S/S	8
12.	Reading Gains-F/S	9
13.	Mathematics Gains-F/S	9

SUMMARY
CHAPTER 1 IN NORTH CAROLINA
1985-1986

LEAs Served 141
Schools Served 1,378

Total Expenditures ..... $79.4 million
Total Participants 125,355

Expenditures Per Participant $633
Expenditures For Personnel ..... $71.7 million

INSTRUCTIONAL PROGRAMS

Subject Area	Expenditures Million	Number Participants	Cost per Student
Reading	$53.0	123,909	$428
Math	$11.7	33,000	$355

STUDENT ACHIEVEMENT—NCE GAINS*

Grade	Spring-Spring		Fall-Spring	
	Reading	Math	Reading	Math
2	15.7	20.7	8.2	—
3	3.9	15.5	7.3	15.1
4	3.3	9.3	5.8	14.2
5	4.7	11.8	6.5	13.3
6	7.3	9.9	6.7	10.2
7	4.3	6.9	6.6	10.5
8	4.9	3.9	5.6	—
9	7.4	0.2	5.0	1.6
10	6.7	7.0	7.9	3.9
11	5.6	—	—	—
12	—	—	—	—

*Gains are reported in normal curve equivalents. In the spring report pre-test data are from CAT-C and post-test data are from CAT-E. Some of the reported gain may result from the equating of scores on different tests. Empty cells indicate no scores reported or too few scores reported to aggregate.

CHAPTER 1 IN NORTH CAROLINA
1985-1986

OVERVIEW

Chapter 1, ECIA is a compensatory program created by the Education Consolidation and Improvement Act, Public Law 98-211. Its goal is to help educationally deprived children raise their achievement levels. This is accomplished by providing basic skills instruction in small groups or in individual settings.

In 1985-86 the Chapter 1 allocations for the 141 school districts in North Carolina totaled 76.1 million dollars. Of the 1,968 schools in those districts, 1,488, or 76%, were eligible to receive Chapter 1 funds based upon poverty indices. A total of 1,378 schools, about 7 of every 10, provided Chapter 1 services.

Figure 1

NORTH CAROLINA SCHOOLS AND CHAPTER 1

Total	1,968—Schools—100%
Eligible	1,488—Schools— 76%
Served	1,378—Schools— 70%

PARTICIPANTS

In the 1985-86 school year, 125,355 students, or 9% of all students in the state, received supplemental educational services through Chapter 1. Of these participants 69% were enrolled in grades 4-8. Relatively few students were served in grades K-2 or in grades 9-12.

Figure 2

Chapter 1 Students By Grade — 1985-86

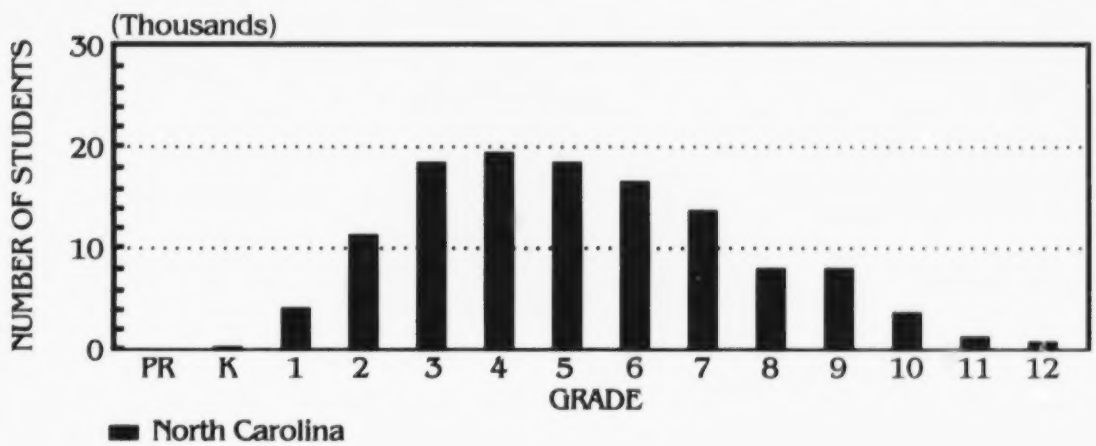


Figure 3

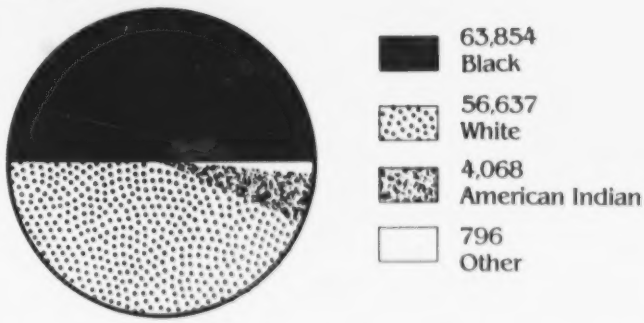
CHAPTER 1 STUDENTS BY GENDER
1985-86

Of the 125,355 students served by Chapter 1, 57% were male and 43% were female.

Figure 4

CHAPTER 1 STUDENTS BY ETHNIC GROUP
1985-86

Of the 125,355 students served by Chapter 1, 51% were Black, 45.1% White, and 3.1% American Indian. "Other" category included Asian and Hispanics, and accounted for .6%.

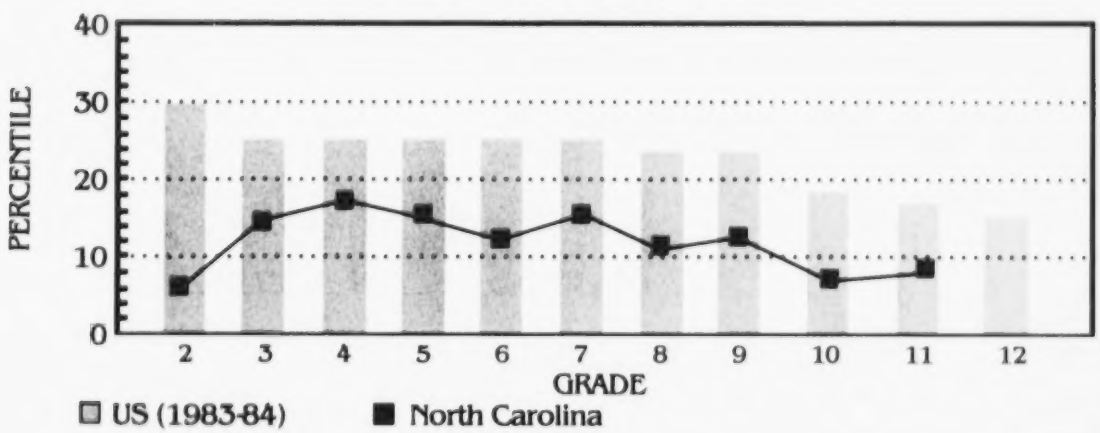


In 1985-86 Chapter 1 programs in North Carolina served the intended target group—educationally disadvantaged children.

Pre-test scores indicate that the students selected for reading programs were in need of remediation. Nationally about 87% of the students scored higher than the typical student selected for Chapter 1 reading in North Carolina. The average percentile rank of the state's Chapter 1 students on the pre-test was 13 in reading.

Figure 5

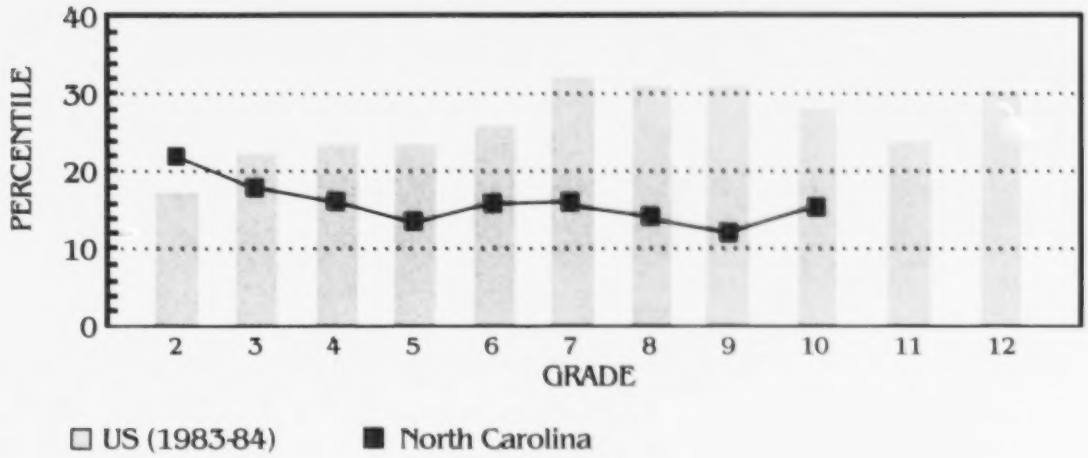
READING PRE-TEST (SPRING)



Pre-test scores indicate that the students selected for mathemathics programs were in need of remediation. Nationally about 87% of the students scored higher than the typical student selected for Chapter 1 mathematics in the state. The weighted average percentile rank of North Carolina's Chapter 1 students on the pre-test was 13 in mathematics.

Figure 6

MATHEMATICS PRE-TEST (SPRING)



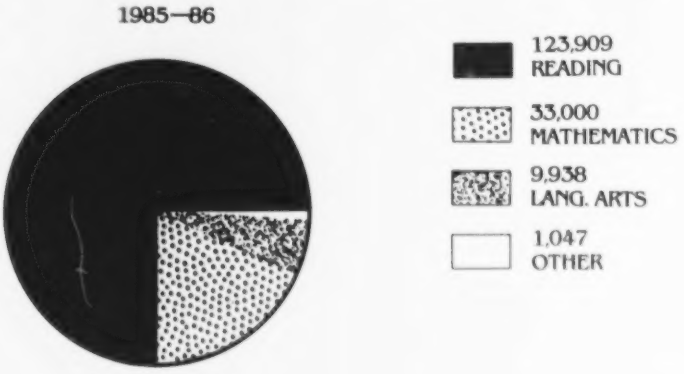
INSTRUCTION

More than 98% of the students receiving Chapter 1 instruction received special help in reading, sometimes in combination with other language skills. More than 26% received special help in mathematics. Some students participated in both reading and mathematics. The "Other" category included limited numbers of students in pre-kindergarten and in after-school programs.

Chapter 1 programs were designed to meet the specific needs of students. Group needs assessments and individual diagnoses were used in the design of instructional programs for students. Low teacher-student ratios enabled teachers to work individually with educationally deprived students.

Figure 7

CHAPTER 1 STUDENTS BY SUBJECT AREA

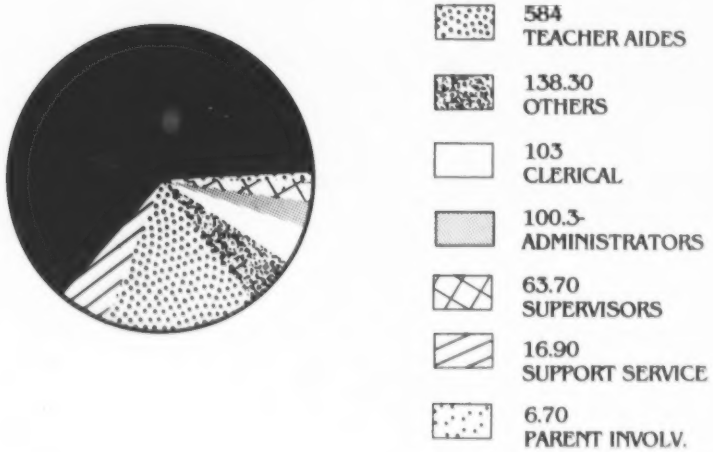


STAFF

Chapter 1 programs employed 3,196.4 full-time equivalent persons during the 1985-86 school year. Teachers were by far the largest group, making up 68% of the Chapter 1 staff. Aides made up 18% of the total staff. The "Other" category included tutors, evaluators, staff development personnel, and custodians.

Figure 8

CHAPTER 1 STAFF — 1985-86
FULL-TIME EQUIVALENTS

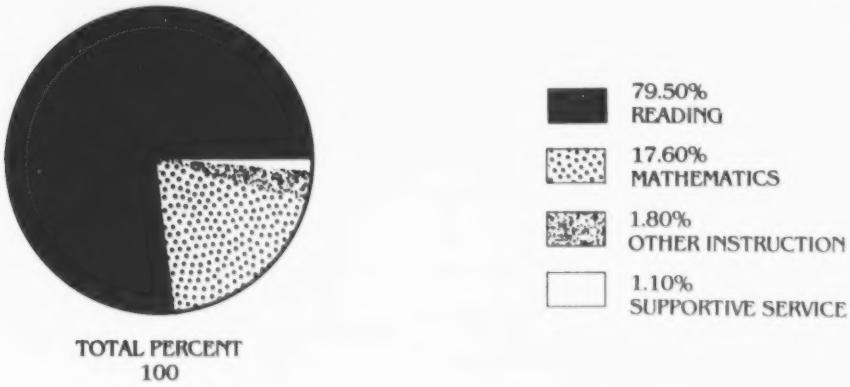


EXPENDITURES

Of the $79.4 million expenditures reported for 1985-86, 90% was used to employ Chapter 1 staff. A total of $71.7 million was expended for salaries and benefits. Of this total for salaries, 88% was for teachers and aides, and slightly more than 7% was for administrators and supervisors.

After excluding administration, equipment, evaluation and staff development costs, the LEAs reported $66.6 million expended directly for instructional and support activities. Reading programs accounted for more than 79% and mathematics accounted for more than 17% of the expenditures. Less than 3% of the total was for the other instructional and support activities.

Figure 9
CHAPTER 1 EXPENDITURES BY ACTIVITY
1985-86



TRAINING

Each year many local Chapter 1 programs provide training to improve the skills of the staff. In 1985-86, 3,214 individuals participated in Chapter 1 funded training. Of those, 75% were Chapter 1 staff and 25% were regular classroom teachers and others who work with the children who receive Chapter 1 services.

PARENT INVOLVEMENT

Parent involvement is an important component in Chapter 1 programs. Sixty-four North Carolina districts have District Parent Advisory Councils. Other districts stress parent participation in other ways.

Parents play a part in determining the needs to be addressed in a Chapter 1 program. A total of 9,194 parents participated in this process in 1985-86 by attending planning meetings, discussion groups, completing questionnaires, and by meeting individually with Chapter 1 staff members.

Parents enriched Chapter 1 programs in numerous other ways. Some worked as volunteers in activities outside the classroom. Students, parents and programs benefited from this involvement.

STUDENT ACHIEVEMENT

Program success is measured in part by standardized achievement tests. School districts choose specific tests which best match their Chapter 1 curriculum. Most districts in North Carolina use the California Achievement Test. Tests are administered at the beginning of the program and near the end of the program.

The difference in Chapter 1 students' scores on pre- and post-tests provides an indicator of program effectiveness. Increases in achievement levels as indicated by test results are referred to as gains—the difference between a post-test and a pre-test Normal Curve Equivalent (NCE) score. Because no NCE gain is expected of educationally deprived students not receiving Chapter 1 assistance, any gain is educationally significant.

EVALUATION RESULTS

Most North Carolina districts evaluate the impact of their Chapter 1 programs on students by pre-testing in the spring and post-testing the following spring. Districts using this approach demonstrated gains in mathematics and reading at every grade in 1985-86. When measured from spring-to-spring, North Carolina's gains in reading and mathematics were generally greater than gains for the country as a whole. National gains were based on data reported for the 1983-84 school year.

Figure 10

READING GAINS—SPRING TO SPRING

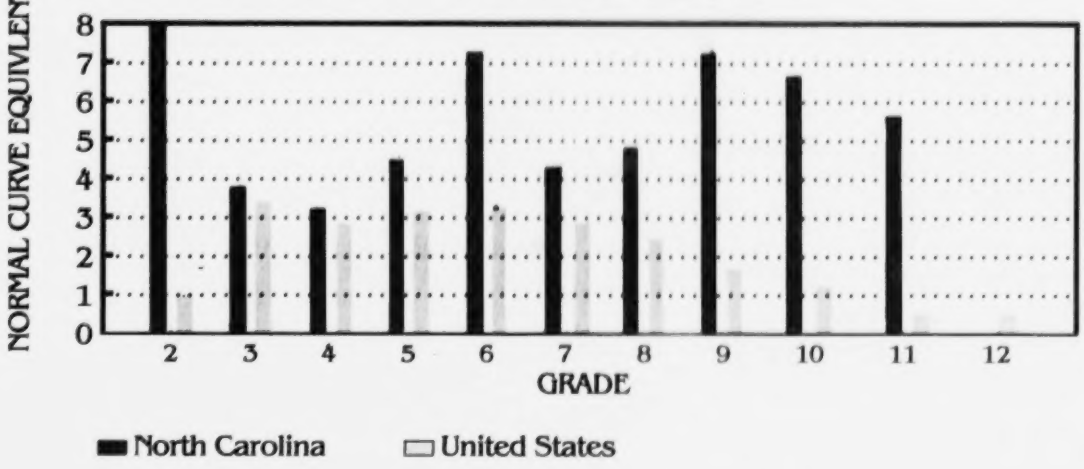
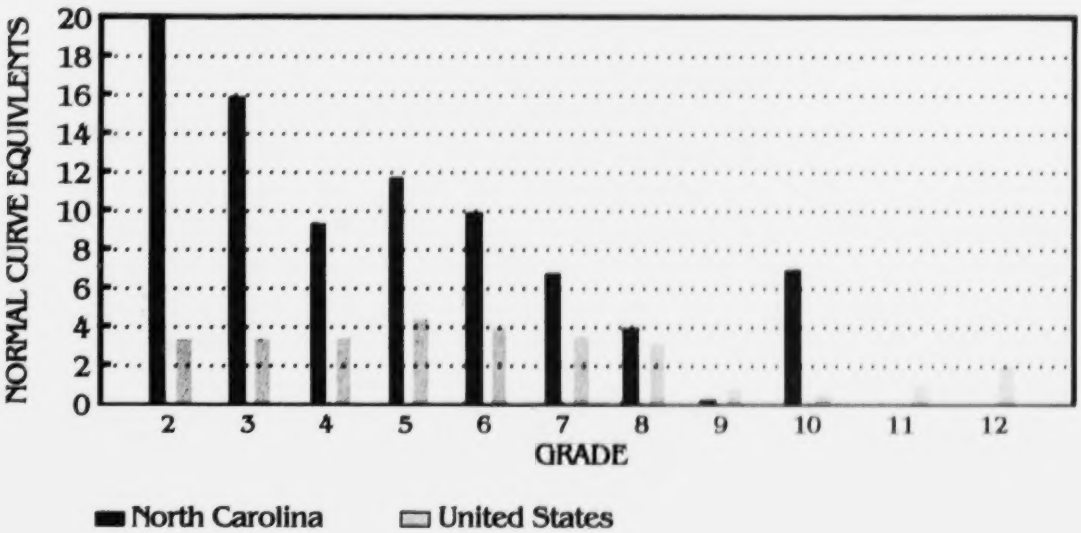


Figure 11

MATHEMATICS GAINS—SPRING TO SPRING



In the spring-to-spring report, pre-test data are from the California Achievement Test, Form C, and post-test data are from Form E. Pre-test scores were equated to CAT-E scores. At most grade levels, gain scores are higher than the prior year. Since some of the reported gain may result from the equating process, the 1985-86 spring-to-spring gains should be interpreted with caution.

When measured from fall-to-spring, national gains in reading were slightly higher than North Carolina gains. North Carolina's mathematics gains were lower than national gains in the elementary grades and higher in the middle grades.

Figure 12

READING GAINS—FALL TO SPRING

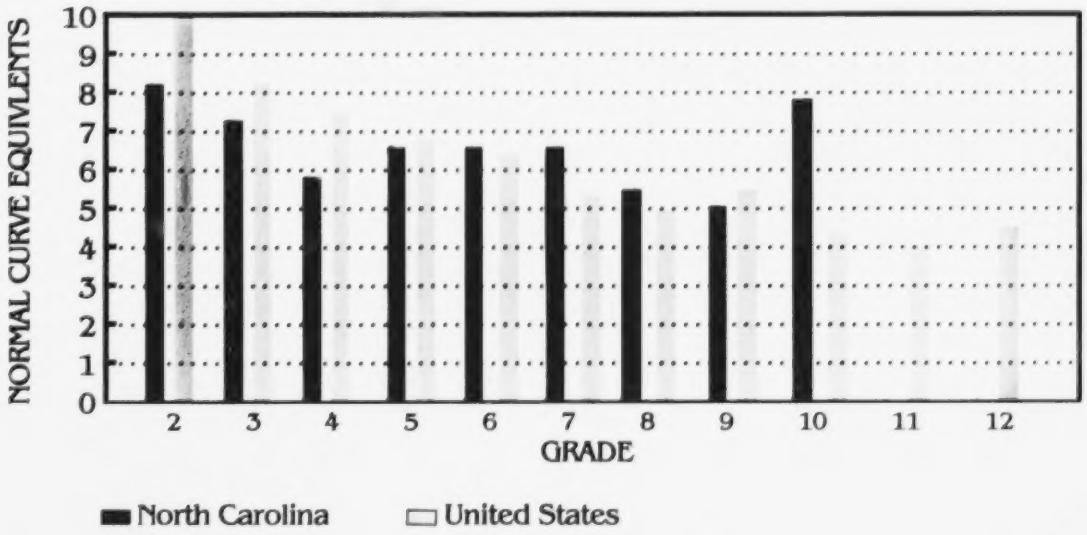


Figure 13

MATHEMATICS GAINS—FALL TO SPRING